

Remarks

1. Summary of Office Action

In the Office Action mailed February 17, 2004, the Examiner rejected claims 1-4, 7-9, 11-13, 15-20, 23, and 24 under 35 U.S.C. § 103(a) as being obvious over a combination of Corbefin et al. (U.S. Patent No. 6,269,243) and Powell (U.S. Patent No. 4,916,460). In addition, the Examiner rejected claims 5, 6, 10, 18, and 21 under 35 U.S.C. § 103(a) as being obvious over a combination of Corbefin, Powell, and Gilhousen (U.S. Patent No. 5,559,865). Finally, the Examiner rejected claims 14 and 22 under 35 U.S.C. §103(a) as being obvious over a combination of Corbefin, Powell, and Mashida (JP408167786A).

2. Amendments and Pending Claims

As shown above, Applicant has amended claims 1, 7, 15, and 23. Therefore, now pending in this application are claims 1-24 of which claims 1, 7, 15, and 23 are independent and the remainder of claims are dependent.

Applicant has amended claims 1, 7, 15, and 23 to recite various elements directed to two concepts: (1) the claimed base stations are "terrestrial base stations," rather than satellites or other non-terrestrial or extra-terrestrial objects; and (2) the cabin antenna (or antennae) are oriented to substantially minimize back lobe energy directed toward a cockpit area in the aircraft. Support for the first of these concepts may be found in the application-as-filed on at least page 9, lines 10-16, and in Fig. 5, while support for the second concept may be found on at least page 10, line 19 through page 11, line 6.

3. The Claimed Invention

Applicant's invention is directed to a system and method for providing wireless communication services to a passenger compartment of an aircraft in such a way that potential

interference with flight systems (e.g. a flight communication and control system) is minimized. This is accomplished through use of a repeater, rather than an on-board base station, along with at least one low-energy transmission medium, such as optical fiber. Finally, the one or more cabin antennae are placed so as to minimize back lobe energy at the cockpit, where sensitive flight systems are often based.

4. Response to § 103 Rejections

The Examiner rejected claims 1-4, 7-9, 11-13, 15-20, 23, and 24 under 35 U.S.C. § 103(a) as being obvious over a combination of Corbefin et al. and Powell. According to M.P.E.P. § 2143, in order to establish a prima facie case of obviousness of a claimed invention by applying a combination of references, the prior art must teach or suggest all of the claim limitations. The combination of Corbefin et al. and Powell fails to show at least two limitations embodied in the independent claims (claims 1, 7, 15, and 23) of the present application: (1) the claimed base stations are "terrestrial base stations," rather than satellites or other non-terrestrial or extra-terrestrial objects; and (2) the cabin antenna (or antennae) is oriented to substantially minimize back lobe energy directed toward a cockpit area in the aircraft. Claims 2-4, 8, 9, 12, 13, 16-20, and 24 depends ultimately on a respective one of independent claims 1, 7, 15, and 23 and incorporate all elements of these claims. Thus, Applicant respectfully submits that Claims 1-4, 7-9, 11-13, 15-20, 23, and 24 are in allowable form.

In addition, the Examiner rejected claims 5, 6, 10, 18, and 21 under 35 U.S.C. § 103(a) as being obvious over a combination of Corbefin, Powell, and Gilhousen (U.S. Patent No. 5,559,865). Gilhousen fails to provide any teaching toward the missing limitations described above with reference to the combination of Corbefin et al. and Powell. Thus, Applicant respectfully submits that Claims 5, 6, 10, 18, and 21 are in allowable form.

Finally, the Examiner rejected claims 14 and 22 under 35 U.S.C. §103(a) as being obvious over a combination of Corbefin, Powell, and Mashida. Here again, Mashida fails to teach the missing limitations described above with reference to the combination of Corbefin et al. and Powell. Thus, Applicant respectfully submits that claims 14 and 22 are allowable.


5. Conclusion

Accordingly, Applicant respectfully submits that all pending claims 1-24 are in condition for allowance. Therefore, Applicant respectfully requests favorable reconsideration and allowance of all of the claims.

Respectfully submitted,

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